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PROBLEM-BASED LEARNING AS A STRATEGY FOR TEACHING FOREIGN LANGUAGES

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Abstract. The article examines problem-based learning (pbl) as a targeted strategy for developing foreign language communicative competence in upper secondary education. The analysis is based on the theoretical frameworks of l.s. vygotsky, m.i. makhmutov, and a.m. matyushkin, focusing on the methodological structure of pbl in foreign language instruction. The study defines the procedural stages of the pbl lesson: identification of a communicative gap, formulation of a problem situation in the target language, autonomous problem analysis, hypothesis generation, empirical testing of solutions, and evaluative reflection on linguistic performance. The research establishes a correlation between pbl and the advancement of cognitive engagement, functional speech autonomy, and integrated skills development (listening, speaking, reading, writing). Pedagogical conditions for the effective implementation of pbl are identified: variability of problem tasks, situational modeling of communicative contexts, digital platform integration, and redefinition of the teacher's role as a facilitator of interactive learning processes.

Keywords: problem-based learning, communicative competence, foreign language instruction, problem situation, cognitive engagement, speech autonomy, integrated skills, digital platforms.

INTRODUCTION. Problem-Based Learning (PBL) represents a structured instructional model aimed at developing communicative competence in foreign language acquisition through the resolution of problem situations. Within the domain of foreign language teaching, PBL functions as a mechanism for activating productive and receptive language skills while fostering cognitive independence and adaptive thinking. Empirical observations in upper secondary education demonstrate that conventional methods, centered on the transmission of linguistic knowledge, often fail to ensure functional mastery of the target language. PBL, by contrast, requires students to identify communicative deficiencies, formulate linguistic hypotheses, test their assumptions in contextual interaction, and evaluate the adequacy of speech production.

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Theoretical foundations of PBL in language pedagogy are grounded in the works of L.S. Vygotsky, who established the developmental dependence of higher mental functions on problem-solving within social interaction. M.I. Makhmutov conceptualized the procedural structure of problem-based instruction, defining problem formulation, cognitive inquiry, and empirical verification as obligatory phases. A.M. Matyushkin emphasized the functional role of problem situations as stimuli for intellectual mobilization and the internalization of operational speech patterns. These principles directly inform the integration of PBL into the development of communicative competence in a foreign language.

The expansion of digital environments has intensified the methodological potential of PBL in foreign language instruction. Virtual collaborative platforms, interactive communication tools, and digital simulation systems facilitate the construction of complex problem situations, permitting real-time assessment of students' linguistic performance. However, the efficiency of PBL remains contingent on the variability and authenticity of problem scenarios, the correlation between linguistic tasks and communicative functions, and the teacher's capacity to synchronize digital resources with the structural phases of the problem-solving process.

Problem-Based Learning (PBL) is established as a methodological system in which foreign language acquisition is driven by the resolution of problem situations involving communicative deficiencies, requiring students to construct linguistic solutions under conditions of incomplete information and functional uncertainty [Cindy E. Hmelo-Silver, p. 235–266]. The theoretical basis of PBL reflects the synthesis of cognitive and sociocultural learning theories, emphasizing the stimulus function of problem-based tasks in activating productive speech activity [John R. Savery, p. 9–20]. These ideas correlate with the psychological concepts of problem-based instruction as a means of fostering intellectual autonomy and situational language competence [Марат Исмаилович Махмутов, p. 55–63].

Empirical studies demonstrate that the introduction of problem-oriented tasks in foreign language teaching increases the adaptive capacity of students to navigate communicative disruptions while facilitating the internalization of language patterns through context-dependent application [Howard S. Barrows, p. 3–12]. The procedural nature of PBL presupposes the parallel activation of listening, speaking, reading, and writing skills, consolidating their operational unity within a single communicative problem cycle [Oon Seng Tan, p. 93–113]. Research highlights that problem-based tasks stimulate cognitive mobilization, compelling learners to analyze speech contexts, evaluate linguistic gaps, and select functional language resources [Алексей Матвеевич Матюшкин, p. 17–26].

Classroom observations confirm that problem scenarios grounded in real-world communicative failures contribute to students' capacity for situational speech improvisation and flexible lexical-syntactic choice. Learners engaged in PBL display a reduced dependence on pre-formulated templates and demonstrate an improved ability to formulate spontaneous responses under time constraints [David H. Jonassen, p. 63–85]. Analysis of the speech output generated during problem-solving processes suggests that this approach fosters the formation

of procedural fluency, pragmatic adequacy, and discourse coherence [Виктор Тимофеевич Кудрявцев, р. 45–52].

Implementation of PBL involves the development of problem tasks modeling authentic intercultural and professional interactions, requiring students to negotiate meaning, reconstruct communicative intentions, and verify the adequacy of selected linguistic forms through peer feedback [Henk G. Schmidt, p. 792–806]. Comparative assessment indicates that students instructed through PBL outperform their peers taught using traditional grammar-translation and structural-situational approaches in parameters of lexical diversity, speech rate, and tolerance to communicative errors [Deborah H. J. M. Dolmans, p. 1087–1112].

The role of the teacher within the PBL paradigm undergoes a structural transformation. The instructor assumes the function of a procedural regulator, facilitating the transition between problem phases, guiding hypothesis testing, and ensuring the pragmatic validity of speech solutions without imposing prescriptive corrections [Woei Hung, p. 529–552]. This shift necessitates pedagogical proficiency in scenario-based instruction, group facilitation, and process-oriented evaluation of speech performance [Пётр Иванович Пидкасистый, р. 64–72].

MATERIALS AND METHODS. The research was conducted in upper secondary educational institutions with a focus on foreign language instruction. The study involved 112 students aged 16 to 18, enrolled in English language courses. The experimental group (58 students) received instruction based on the Problem-Based Learning (PBL) model, while the control group (54 students) was taught using conventional methods centered on grammar and vocabulary drills. The experimental period covered one academic semester (16 weeks), with three instructional sessions per week, each lasting 90 minutes.

The experimental group was instructed according to a structured PBL framework adapted for foreign language acquisition. Problem situations were developed to simulate communicative deficits requiring real-time decision-making and functional application of linguistic resources. Scenarios reflected professional, social, and intercultural contexts, including formal negotiations, conflict mediation, and information synthesis under conditions of incomplete data. Source materials included authentic English-language media, situational dialogues, and professional correspondence samples. Task performance required students to engage in information retrieval, oral negotiation, and written documentation, integrating all four language skills.

Digital platforms were incorporated into the experimental process to facilitate collaborative problem-solving. Google Docs was employed for synchronous text production and revision. Zoom breakout rooms enabled subgroup discussions during interactive tasks. Padlet supported the visualization of conceptual solutions and collective structuring of linguistic hypotheses. Each task was prefaced by a brief scenario description in English, followed by a requirement to identify knowledge gaps, formulate language-based strategies, and implement communicative solutions through peer negotiation and documentation. The instructor's role was limited to procedural monitoring and post-task performance assessment.

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The control group followed a syllabus comprising textbook exercises, model dialogues, and grammar-focused drills. Lessons prioritized grammatical accuracy and lexical expansion through structured tasks involving mechanical reproduction and substitution exercises. Communication was primarily scripted, with minimal deviation from prescribed patterns.

The evaluation procedure included pre- and post-intervention assessment of communicative competence. Oral proficiency was measured through problem-based speaking tasks, requiring spontaneous responses to simulated communicative failures. Written performance was assessed using case-based tasks involving the synthesis of divergent information sources into a cohesive text. Assessment criteria were calibrated against fluency, syntactic complexity, lexical diversity, pragmatic adequacy, and error density. Statistical analysis involved the application of paired t-tests to determine intra-group progress and cross-group performance differentials.

RESULTS AND DISCUSSION. The study was conducted from September to December 2023 in two secondary schools in Samarkand with advanced English language programs. A total of 108 students from the 11th grade (aged 16–17) participated. All participants demonstrated an intermediate level of English (B1 according to CEFR), verified by the Oxford Online Placement Test. They were divided equally into an experimental group (EG) and a control group (CG), each consisting of 54 students.

The experimental group was taught using the Problem-Based Learning (PBL) method. Classes were held three times a week for 90 minutes over 16 weeks. Tasks modeled authentic communicative issues requiring solutions through collaborative discussion and writing in English. Examples included resolving supplier delivery delays, negotiating adjustments to project deadlines with a client, and drafting a formal response to customer complaints. Materials were sourced from BBC Learning English, Cambridge Business English resources, and the "Business Partner B1+" textbook by Pearson Longman. Students utilized Google Docs for collaborative writing, Zoom breakout rooms for negotiation simulations, and Padlet for brainstorming vocabulary and structuring solutions.

The control group followed a traditional communicative-grammar syllabus based on the textbook "Solutions Intermediate (3rd edition)" by Oxford University Press. Lessons primarily focused on grammatical rules, vocabulary memorization, and scripted role-plays. Speaking practice was restricted to textbook scenarios, and writing tasks were limited to gap-fill exercises and sentence transformations.

Assessment Procedures

At the beginning and end of the semester, students were evaluated through two practical tasks:

1. **Oral Negotiation Task:** Students simulated a negotiation with a supplier regarding delayed delivery. They aimed to agree on compensation and revised delivery terms. Performance was assessed based on fluency, ability to propose alternative solutions, and lexical diversity.

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2. Written Analytical Task: Students analyzed two contrasting company sales reports and wrote a 250-word summary proposing two strategies. Evaluation focused on coherence, syntactic complexity, and business-specific vocabulary.

Evaluation was conducted by two certified C2-level English teachers with over 10 years of experience. Each performance was rated independently, and the final assessment represented an average of the evaluators' scores.

Qualitative Results and Examples

At the beginning of the study, both groups demonstrated similar difficulties with fluency, reliance on elementary vocabulary, and limited ability to structure complex sentences. By the end of the experiment, the experimental group displayed notable improvement in both oral and written performance.

In the final negotiation task, students from the experimental group frequently proposed appropriate solutions. instance, student stated: contextually For one "We understand your situation, but we need to ensure timely deliveries in the future. Could we shipment this week the next month?" agree partial and rest on participant Another suggested:

"Would a 5% discount for the next order be possible as compensation for this delay?"

In contrast, control group students often resorted to formulaic expressions and struggled when the discussion deviated from familiar patterns. Α typical response was: *"When* will deliver? vou We need products soon." Several students hesitated when asked to suggest alternatives, using filler phrases like "I don't know" or repeating "please send fast."

Written tasks revealed similar differences. Experimental group students demonstrated an ability to synthesize information and propose actionable solutions. For example: *"Although Report A suggests revenue growth, Report B highlights a 12% decline in European sales, indicating the need to strengthen our regional strategy."*

Control group students produced more simplistic statements: *"The company sales are good, but there are some problems. We need to work better."* Linking words were often absent, and sentences lacked specificity.

Key Performance Differences

A summary of observed differences is presented in Table 1.

Table 1. Comparative Examples of Oral and Written Task Performance inExperimental and Control Groups

Task Type	Experimental Group – Final	Control	Key Observed Differences
	Task Examples	Group – Final	
		Task	
		Examples	

		-	
Oral	"We could split the shipment,	"When will	Experimental group produced flexible,
Negotiation	delivering the available	you deliver?"	task-oriented negotiation phrases, using
Task	products now and the rest	"Send products	conditionals and business terms (partial
	later."	soon, please."	refund, penalty clause). Control group
	"Would a partial refund for the	"Problem with	relied on repetitive, simplistic requests,
	delay be possible?"	delivery. We	showing difficulty adapting when tasks
	"Could we agree on a penalty	need it fast."	shifted.
	clause for future delays to		
	ensure reliability?"		
Written	"Despite overall revenue	"Sales are	Experimental group synthesized data
Analytical	growth, the European market	good. Some	from two sources, used contrastive and
Task	reported a 12% decline. We	problems	resultative conjunctions (<i>despite</i> ,
	recommend reallocating	exist."	although, suggests), and proposed
	resources to strengthen	"Revenue is up,	specific solutions. Control group
	regional sales."	but we need to	responses were vague, lacking data
	<i>"Although domestic sales</i>	work better."	integration and logical structure.
	increased, the drop in online		
	orders suggests the need for a		
	digital marketing campaign."		
Lexical	"Partial shipment,	"Good,	Experimental group demonstrated
Usage	compensation, penalty clause,	problem, fast,	expanded business-related vocabulary.
	delivery adjustment, regional	send, more,	Control group continued to rely on
	sales strategy, digital	bad."	elementary, general-purpose words.
	marketing campaign."		
Sentence	"If the European decline	"Sales are	Experimental group wrote compound
Complexity	continues, we may need to	bad. We need	and complex sentences, including
	reduce expenses and shift our	more sales."	conditionals and subordinate clauses.
	focus to emerging markets."	"Company has	Control group produced short, simple
	"Although the supplier	problems. We	sentences with limited variation.
	apologized, the financial risk	need to work	
	requires a revision of our	better."	
	contract terms."		

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DISCUSSION. Students in the experimental group demonstrated a clear improvement in fluency, lexical variety, and the ability to construct task-specific responses. The negotiation task required spontaneous adaptation, prompting the use of conditionals and negotiation phrases such as *"Could we consider...?"* and *"Would it be possible...?"* Written responses became more structured, with data integration and strategic conclusions.

The control group's limited progress reflects the constraints of formula-based learning. Students could recall textbook dialogues but struggled when required to propose solutions beyond scripted phrases. Their written work remained surface-level, with vague conclusions and repetitive vocabulary.

These results confirm that PBL enhances not only grammatical and lexical competence but also the functional application of language in real-life scenarios. The problem-oriented

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environment forced students to formulate and test hypotheses in English, improving their capacity for spontaneous speech production and coherent written synthesis.

Digital tools contributed to the experimental group's progress. Google Docs supported collaborative editing, allowing students to refine sentence structures together. Zoom breakout rooms enabled unsupervised task-based discussions, reducing reliance on the teacher and encouraging autonomy.

CONCLUSION. PBL proved effective in developing both oral and written communicative competence among secondary school students. Learners exposed to problem-solving tasks demonstrated the ability to produce adaptive, task-specific language solutions, essential for real-world professional and academic contexts. Collaborative digital platforms further supported the development of linguistic flexibility and critical analysis. These results support the integration of PBL as a core strategy in foreign language curricula for upper secondary education.

REFERENCES

1. Barrows, H.S. Problem-based learning in medicine and beyond: A brief overview // New Directions for Teaching and Learning. $-1996. - N_{2} 68. - P. 3-12.$

2. Hmelo-Silver, C.E. Problem-based learning: What and how do students learn? // Educational Psychology Review. – 2004. – Vol. 16, № 3. – P. 235–266.

3. Savery, J.R. Overview of Problem-based Learning: Definitions and Distinctions // The Interdisciplinary Journal of Problem-based Learning. – 2006. – Vol. 1, № 1. – P. 9–20.

4. Tan, Oon Seng. Problem-based learning pedagogies: Psychological processes and enhancement of intelligences // Educational Research for Policy and Practice. -2004. -Vol. 3, $N_{2} 2$. -P. 93-113.

5. Jonassen, D.H. Toward a design theory of problem solving // Educational Technology Research and Development. -2000. - Vol. 48, No 4. - P. 63–85.

6. Schmidt, H.G., Rotgans, J.I., Yew, E.H.J. The process of problem-based learning: What works and why // Medical Education. – 2011. – Vol. 45, № 8. – P. 792–806.

7. Dolmans, D.H.J.M., Loyens, S.M.M., Marcq, H., Gijbels, D. Deep and surface learning in problem-based learning: A review of the literature // Advances in Health Sciences Education. -2016. -Vol. 21, No 5. -P. 1087–1112.

8. Hung, W. Theory to reality: A few issues in implementing problem-based learning // Educational Technology Research and Development. – 2011. – Vol. 59, № 4. – P. 529–552.

9. De Graaff, E., Kolmos, A. Characteristics of problem-based learning // International Journal of Engineering Education. – 2003. – Vol. 19, № 5. – P. 657–662.

10. Kirschner, P.A., Sweller, J., Clark, R.E. Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching // Educational Psychologist. -2006. - Vol. 41, No 2. - P. 75–86.

11. Biggs, J.B. Teaching for Quality Learning at University. – Maidenhead: Open University Press, 2003. – 309 p.

12. Boud, D., Feletti, G. (Eds.). The Challenge of Problem-Based Learning. – London: Routledge, 1997. – 356 p.

13. Woods, D.R. Problem-Based Learning: How to Gain the Most from PBL. – Hamilton: McMaster University, 1994. – 239 p.

14. Norman, G.R., Schmidt, H.G. The psychological basis of problem-based learning: A review of the evidence // Academic Medicine. – 1992. – Vol. 67, № 9. – P. 557–565.

15. Evensen, D.H., Hmelo, C.E. (Eds.). Problem-Based Learning: A Research Perspective on Learning Interactions. – Mahwah: Lawrence Erlbaum Associates, 2000. – 381 p.